Yordan M Georgiev

List of Publications by Year
in descending order

59	934	516561 16	501076 28
papers	citations	h-index	g-index

61	61	61	1218
all docs	docs citations	times ranked	citing authors

#	Article	IF	Citations
1	Mid- and far-infrared localized surface plasmon resonances in chalcogen-hyperdoped silicon. Nanoscale, 2022, 14, 2826-2836.	2.8	9
2	Electrical Characterization of Germanium Nanowires Using a Symmetric Hall Bar Configuration: Size and Shape Dependence. Nanomaterials, 2021, 11, 2917.	1.9	5
3	Controlled Silicidation of Silicon Nanowires Using Flash Lamp Annealing. Langmuir, 2021, , .	1.6	4
4	Formation and crystallographic orientation of NiSi2â€“Si interfaces. Journal of Applied Physics, 2020, 128, 085301.	1.1	7
5	Resonant tunneling and hole transport behavior in low noise silicon tri-gate junctionless single hole transistor. Semiconductor Science and Technology, 2020, 35, 065011.	1.0	1
6	Ultrahigh Negative Infrared Photoconductance in Highly As-Doped Germanium Nanowires Induced by Hot Electron Trapping. ACS Applied Electronic Materials, 2020, 2, 1934-1942.	2.0	8
7	Towards Scalable Reconfigurable Field Effect Transistor using Flash Lamp Annealing. , 2020, , .		2
8	Nanoscale n++-p junction formation in GeOI probed by tip-enhanced Raman spectroscopy and conductive atomic force microscopy. Journal of Applied Physics, 2019, 125, 245703.	1.1	5
9	Towards Reconfigurable Electronics: Silicidation of Top-Down Fabricated Silicon Nanowires. Applied Sciences (Switzerland), 2019, 9, 3462.	1.3	16
10	Detection of ultra-low protein concentrations with the simplest possible field effect transistor. Nanotechnology, 2019, 30, 324001.	1.3	12
11	CMOSâ€Compatible Controlled Hyperdoping of Silicon Nanowires. Advanced Materials Interfaces, 2018, 5, 1800101.	1.9	11
12	Observation of Ultrafast Solid-Density Plasma Dynamics Using Femtosecond X-Ray Pulses from a Free-Electron Laser. Physical Review X, 2018, 8, .	2.8	21
13	Formation of n- and p-type regions in individual Si/SiO₂ core/shell nanowires by ion beam doping. Nanotechnology, 2018, 29, 474001.	1.3	6
14	Fabrication of Si and Ge nanoarrays through graphoepitaxial directed hardmask block copolymer self-assembly. Journal of Colloid and Interface Science, 2018, 531, 533-543.	5.0	1
15	A wired-AND transistor: Polarity controllable FET with multiple inputs. , 2018, , .		24
16	New Generation Electron Beam Resists: A Review. Chemistry of Materials, 2017, 29, 1898-1917.	3.2	101
17	A new precision measurement of the Î± -decay half-life of 190 Pt. Physics Letters, Section B: Nuclear, Elementary Particle and High-Energy Physics, 2017, 768, 317-320.	1.5	12
18	Dopant induced single electron tunneling within the sub-bands of single silicon NW tri-gate junctionless n-MOSFET. Journal Physics D: Applied Physics, 2017, 50, 365104.	1.3	5

#	Article	IF	Citations
19	Doping top-down e-beam fabricated germanium nanowires using molecular monolayers. Materials Science in Semiconductor Processing, 2017, 62, 196-200.	1.9	17
20	Local Formation of InAs Nanocrystals in Si by Masked Ion Implantation and Flash Lamp Annealing. Physica Status Solidi C: Current Topics in Solid State Physics, 2017, 14, 1700188.	0.8	3
21	Novel germanium surface modification for sub-10â€‰nm patterning with electron beam lithography and hydrogen silsesquioxane resist. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2016, 34, .	0.6	11
22	High sensitivity silicon single nanowire junctionless phototransistor. Applied Physics Letters, 2016, 108, .	1.5	11
23	Electrical Characterization and Parameter Extraction of Junctionless Nanowire Transistors. Journal of Nano Research, 2016, 39, 17-33.	0.8	10
24	Correlation of lithographic performance of the electron beam resists SML and ZEP with their chemical structure. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2015, 33, .	0.6	4
25	Solvent Vapor Annealing of Block Copolymers in Confined Topographies: Commensurability Considerations for Nanolithography. Macromolecular Rapid Communications, 2015, 36, 762-767.	2.0	18
26	Aligned silicon nanofins via the directed self-assembly of PS-b-P4VP block copolymer and metal oxide enhanced pattern transfer. Nanoscale, 2015, 7, 6712-6721.	2.8	47
27	Organo-arsenic Molecular Layers on Silicon for High-Density Doping. ACS Applied Materials & Interfaces, 2015, 7, 15514-15521.	4.0	38
28	Parallel Arrays of Sub-10 nm Aligned Germanium Nanofins from an In Situ Metal Oxide Hardmask using Directed Self-Assembly of Block Copolymers. Chemistry of Materials, 2015, 27, 6091-6096.	3.2	23
29	Epitaxial Post-Implant Recrystallization in Germanium Nanowires. Crystal Growth and Design, 2015, 15, 4581-4590.	1.4	8
30	Junctionless nanowire transistor fabricated with high mobility Ge channel. Physica Status Solidi - Rapid Research Letters, 2014, 8, 65-68.	1.2	16
31	Component design and testing for a miniaturised autonomous sensor based on a nanowire materials platform. Microsystem Technologies, 2014, 20, 971-988.	1.2	1
32	Fully CMOS-compatible top-down fabrication of sub-50nm silicon nanowire sensing devices. Microelectronic Engineering, 2014, 118, 47-53.	1.1	14
33	Access resistance reduction in Ge nanowires and substrates based on non-destructive gas-source dopant in-diffusion. Journal of Materials Chemistry C, 2014, 2, 9248-9257.	2.7	18
34	Attomolar streptavidin and pH, low power sensor based on 3D vertically stacked SiNW FETs. , 2014, , .		4
35	Characterisation of a novel electron beam lithography resist, SML and its comparison to PMMA and ZEP resists. Microelectronic Engineering, 2014, 123, 126-130.	1.1	24
36	Electrical characterization of high performance, liquid gated vertically stacked SiNW-based 3D FET biosensors. Sensors and Actuators B: Chemical, 2014, 199, 291-300.	4.0	23

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37	Junctionless silicon nanowire transistors for the tunable operation of a highly sensitive, low power sensor. Sensors and Actuators B: Chemical, 2013, 183, 1-10.	4.0	43
38	Functionalized 3D 7×20-array of vertically stacked SiNW FET for streptavidin sensing. , 2013, , .		2
39	A miniaturised autonomous sensor based on nanowire materials platform: the SiNAPS mote. , 2013, , .		2
40	Resistâ€“substrate interface tailoring for generating high-density arrays of Ge and Bi2Se3 nanowires by electron beam lithography. Journal of Vacuum Science and Technology B:Nanotechnology and Microelectronics, 2012, 30, .	0.6	17
41	FIB Patterning of Stainless Steel for the Development of Nano-Structured Stent Surfaces for Cardiovascular Applications. Journal of Physics: Conference Series, 2012, 371, 012065.	0.3	6
42	Top-down process of Germanium nanowires using EBL exposure of Hydrogen Silsesquioxane resist. , 2012, , .		5
43	Porous to Nonporous Transition in the Morphology of Metal Assisted Etched Silicon Nanowires. Japanese Journal of Applied Physics, 2012, 51, 11PE03.	0.8	5
44	Supercritical drying process for high aspect-ratio HSQ nano-structures. Microelectronic Engineering, 2006, 83, 1124-1127.	1.1	17
45	Impact of supercritical CO[sub 2] drying on roughness of hydrogen silsesquioxane e-beam resist. Journal of Vacuum Science & Technology B, 2006, 24, 570.	1.3	7
46	Megasonic-assisted development of nanostructures. Journal of Vacuum Science & Technology B, 2006, 24, 1827.	1.3	10
47	Surface roughness of hydrogen silsesquioxane as a negative tone electron beam resist. Vacuum, 2005, 77, 117-123.	1.6	29
48	Highly selective etch process for silicon-on-insulator nano-devices. Microelectronic Engineering, 2005, 78-79, 212-217.	1.1	32
49	Interferometric in situ alignment for UV-based nanoimprint. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2004, 22, 3242.	1.6	29
50	Megasonic-assisted development of nanostructures: Investigations on high aspect ratio nanoholes. Applied Physics Letters, 2004, 85, 5055-5057.	1.5	7
51	Electrical characterization of 12 nm EJ-MOSFETs on SOI substrates. Solid-State Electronics, 2004, 48, 739-745.	0.8	6
52	Study of a high contrast process for hydrogen silsesquioxane as a negative tone electron beam resist. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 2018.	1.6	133
53	Fabrication of 12 nm electrically variable shallow junction metalâ€“oxideâ€“semiconductor field effect transistors on silicon on insulator substrates. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 2003, 21, 2975.	1.6	9
54	Numerical modelling of the processes of exposure and development in electron beam lithography on high-temperature superconductor thin films. Thin Solid Films, 1998, 323, 222-226.	0.8	5

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55	Analysis of the proximity function in electron-beam lithography on high- superconducting thin-films. Superconductor Science and Technology, 1996, 9, 565-569.	1.8	3
56	A program for Monte Carlo simulation of penetration and scattering of accelerated electrons in multicomponent multilayer targets. Vacuum, 1996, 47, 1227-1230.	1.6	8
57	Monte Carlo simulation of inclined incidence of fast electrons to solids. Journal of Vacuum Science & Technology an Official Journal of the American Vacuum Society B, Microelectronics Processing and Phenomena, 1996, 14, 2462.	1.6	1
58	A Monte Carlo study of proximity effects in electron-beam patterning of high-Tc superconducting thin films. Physica C: Superconductivity and Its Applications, 1995, 249, 187-195.	0.6	9
59	Monte Carlo simulation of electron-beam exposure distributions in the resist on structures with high-Tc superconducting thin films. Thin Solid Films, 1994, 251, 67-71.	0.8	6